



Federal Energy Management Program Conference

“State Renewable Energy Incentive Programs”

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Protection**

**Director, Bureau of Energy, Innovations and
Technology Development**

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About Our Office

- **Office of Energy and Technology Development**
- **45 Staff Members Statewide in 7 Offices**
- **Services:**
 - **Pollution Prevention/Energy Efficiency Site Visits**
 - **Technical Assistance for Renewable Energy Projects**
 - **Technical Assistance for Alternative Fuel Projects**
- **Call Us! 717-783-0540**
- **Visit Us on the Web: www.dep.state.pa.us (directLINK: "OETD")**



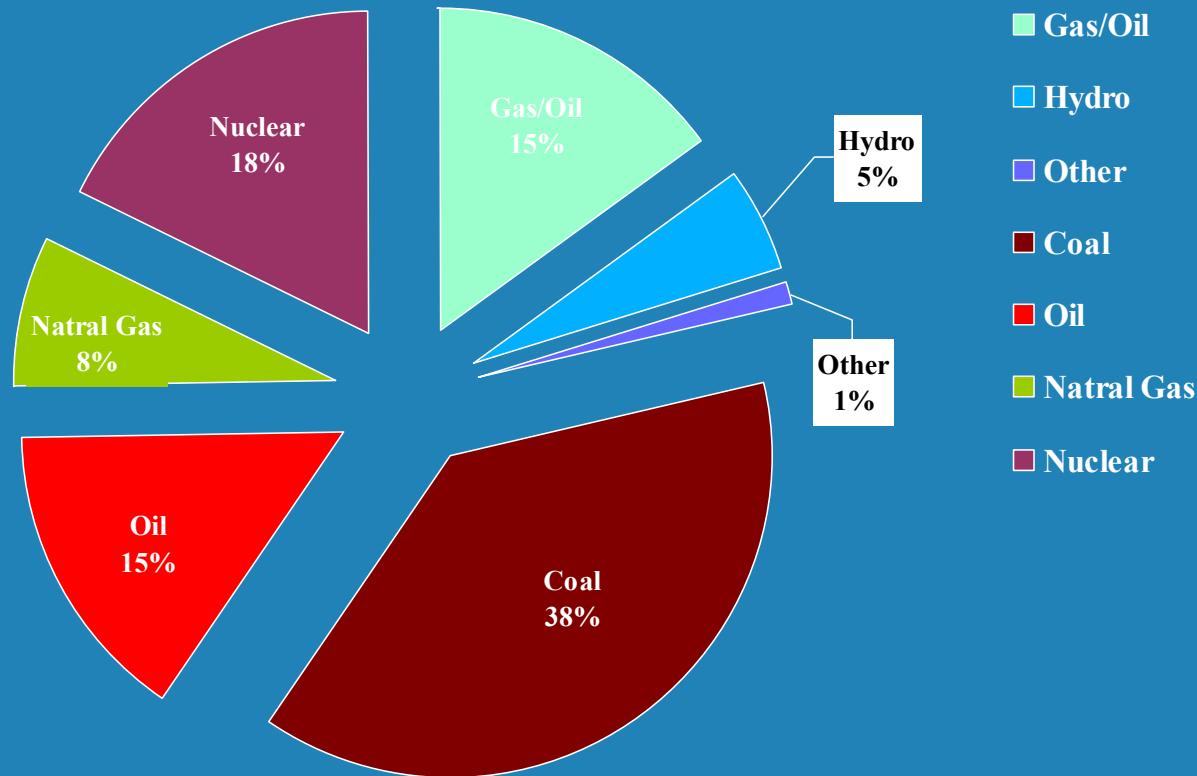
Project Areas

- **Stationary Generation: Green Electricity, On-site Generation**
- **Alternative Fuels**
- **Energy Efficiency, Conservation, and Green Buildings**



Stationary Projects

- **PJM's Electricity Profile**

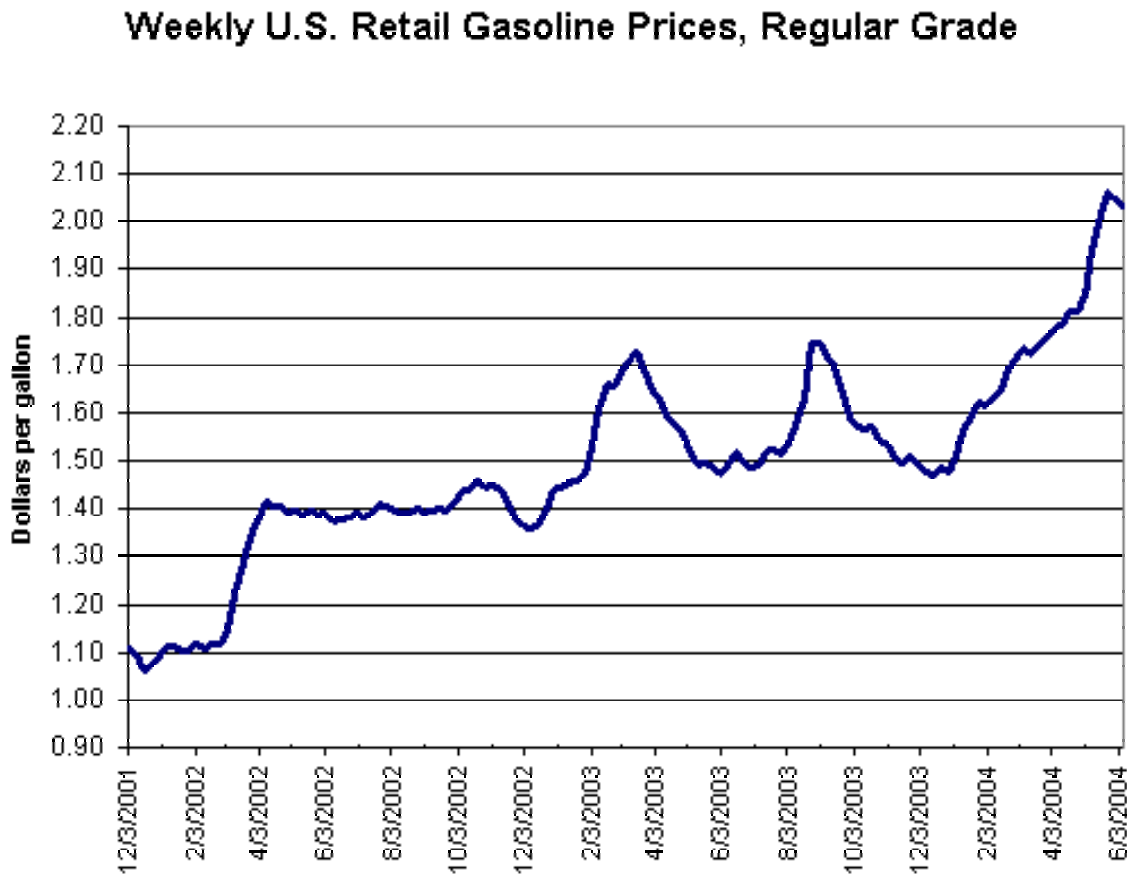


Stationary Projects (continued)



- **Pennsylvania Rate Caps scheduled to end beginning in 2010**
- **Natural Gas prices expected to be two to three times higher than historical levels**
- **The Commonwealth's Green Electricity Purchase 10% (100,000 Mwh)**
- **Advanced Energy Portfolio Standard 10% Advanced Energy in Ten Years (Three Other Pennsylvania RPS Bills)**
- **Visit "CleanYourAir.org about the benefits of clean electricity**
- **Energy Harvest**

Alternative Fuel Projects



Source: Energy Information Administration

- **Pennsylvania prices tend to track very closely to national prices**
- **Usually within a three to five cent range, above or below**
- **As of 6-14 the average price for regular unleaded was \$1.99 in the mid-Atlantic region**

Alternative Fuel Projects (continued)



- **Potential for longer-term price instability due to several factors (reduced worldwide excess capacity; limited excess refining capacity; increasing global demand)**
- **Penn State Hydrogen Refueling Station**
- **Technical Assistance: PennDOT and PA Turnpike Commission Biodiesel Demonstrations; Natural Gas Refueling Stations**
- **Alternative Fuels Incentive Grant Program**



Energy Efficiency, Conservation, Green Buildings

- **Building Construction Accounts for:**
 - 40% of all raw materials usage globally
 - 36% total U.S primary energy usage
 - 136 million tons of construction and demolition waste in the U.S.
 - 12% of all potable water use in the U.S.
 - 30% of total U.S. greenhouse gas emissions
 - Source: U.S. Green Building Council; visit them at: <http://www.usgbc.org/>



Energy Efficiency, Conservation, Green Buildings

- **Pennsylvania DoD Environmental Partnership Agreement**
- **Pollution Prevention/Energy Efficiency Site Visit**
 - **Tobyhanna Army Depot – reduced 297,000 Btu of annual energy use; total annual savings for all measures: \$300,000**
- **Green Construction: Cambria Office Building – 50% reductions versus conventionally designed buildings**
 - **To learn more visit us at:**
<http://www.gggc.state.pa.us/building/cambria/default.htm>
- **Building Retrofits: \$33 million in investments leading to \$58 million in savings**



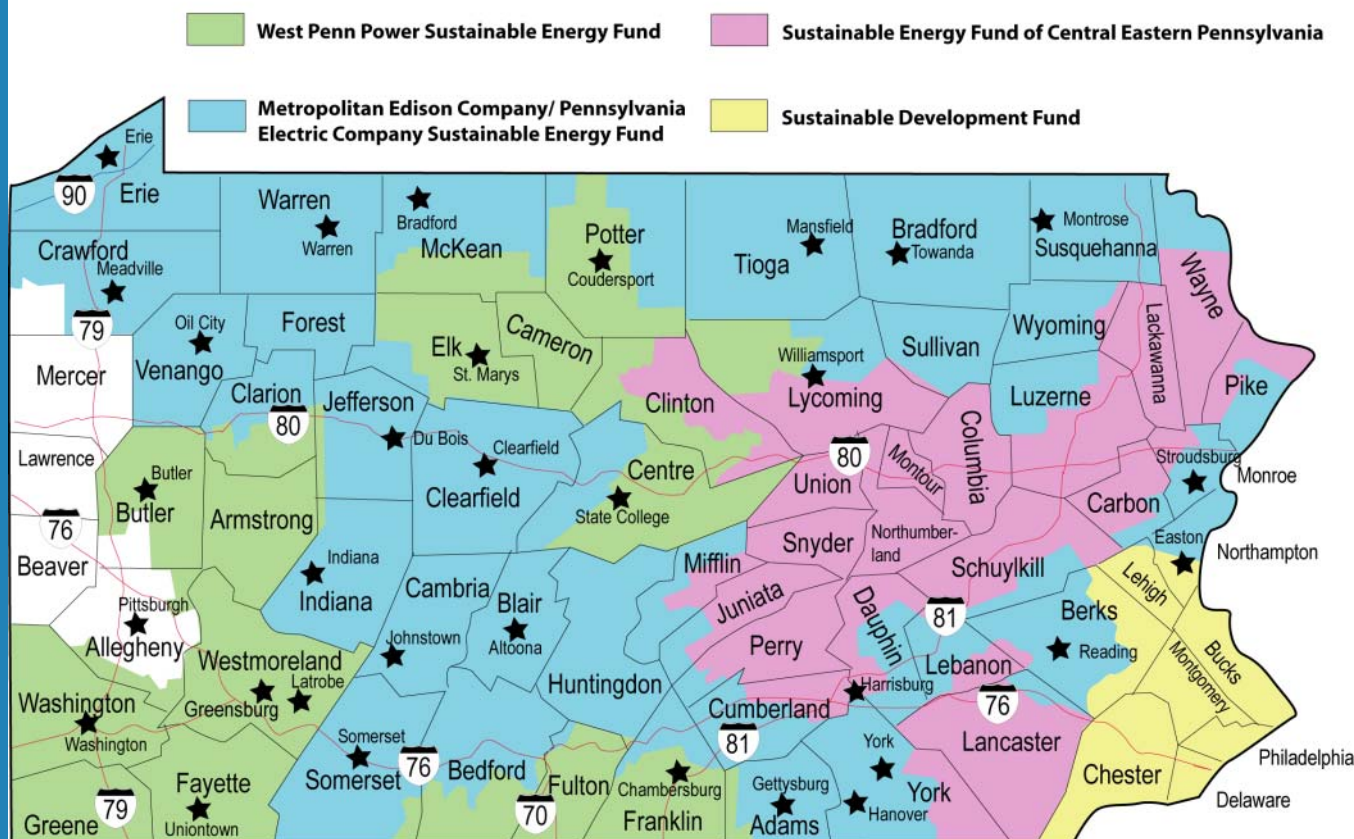
Pennsylvania's Sustainable Energy Funds

- **Four individual funds covering various service territories**
- **Funds' Mission:**
 - The development and use of renewable energy and clean energy technology
 - Energy conservation and energy efficiency
 - Renewable energy business initiatives
 - Projects which improve the environment in the company's service territories, related to transmission and distribution facilities
- **For more information, visit:**
<http://www.paenergy.state.pa.us/sef.htm>



Pennsylvania's Sustainable Energy Funds (continued)

Sustainable Energy Fund Service Region Coverage Map





What to Watch For

- **Stationary Issues**
 - PA Rate Caps
 - Net Metering and Interconnection Legislation or Standards
 - RPS/AEPS Legislation
 - RGGI, Climate Change Initiatives
- **Alternative Fuels**
 - MTBE – Federal Energy Bill, State Bans
 - State Vehicle Emissions Standards
 - McCain/Lieberman



Questions, Comments, Criticisms...

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